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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,595	05/31/2007	Gerd Breiter	DE920030045US1	9859

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INTERNATIONAL BUSINESS MACHINES CORPORATION
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EXAMINER

CHEEMA, UMAR

ART UNIT	PAPER NUMBER
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2444

NOTIFICATION DATE	DELIVERY MODE
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12/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

poiplaw2@us.ibm.com

Office Action Summary	Application No. 10/583,595	Applicant(s) BREITER ET AL.	
	Examiner UMAR CHEEMA	Art Unit 2444	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 June 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed subject matter "managing distributed resources, distributed engine, management workflow engine, correlation services etc." must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure

Art Unit: 2444

number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-10 are are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 1 and 6 recites a method comprising steps of management system for managing distributed resources that may be performed mentally and or manually by a human being. Thus the method neither explicitly recites another statutory class of invention (i.e. a machine, a manufacture or a composition of matter) nor inherently requires the use of a particular machine or apparatus. Accordingly, the recited invention is nonstatutory subject matter. Thus to qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that

Art Unit: 2444

accomplished the method steps of managing distributed resources (In re Bilski, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008)).

5. Claims 2-5, and 7-10 are dependent claims of claims 1 and 6 and do not cure the deficiency of claim 1 and 6, therefore, are rejected under same rational.

6. Claim 11 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Even though claim is directed to a computer program product, however, according to specifications, paragraph [0032], computer program product can contain software code to execute the described management method. Since software is not directed to statutory subject matter, therefore, claim 11 is found to be non-statutory. Applicant is further advised to amend the language of claim 11 to more suitable language of "a computer program product stored in the internal memory of a digital computer", as recited in specifications (see par. [0032]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

Art Unit: 2444

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al. (hereinafter Bauer) (US Patent No. 6,690,788) in view of Feridun et al. (hereinafter Feridun) (US Patent No. 6,336,139).
8. Regarding claim 1, Bauer discloses a management system for managing distributed resources (135) (resource manager) (see Fig. 1) comprising: a workflow engine (134) (Integrated Work Management Engine) (see Fig. 1) for executing management workflows in order to actively control the distributed resources (Work Management engine is responsible for initiation and control of all workflow functions within the system) (see col. 6, lines 8-24); wherein autonomic correlation services are introduced that manage different functional parts of the managed system in cooperation with the workflow engine, wherein each correlation service employs a correlation engine (objectives and responsibilities of workflow management system based on rules engine and rules data) (see col. 8, line 58-col. 9, line 56) and a set of rules (rules engine) that describe how underlying resources shall be managed, and wherein a controller communicates with the correlation services (rules engine and rules data for customer care center in integrated work management system) (see col. 9, lines 9-56).
9. Although Bauer discloses substantial features of applicant's claimed invention, Bauer fails to disclose: wherein services are autonomic correlation services. Nevertheless, autonomic correlation services were well known in the art at the time of the present invention.

Art Unit: 2444

10. In analogous teaching, Feridun discloses wherein services are correlation services (see abstract, col. 2, lines 21-25; method of event correlation that preferably implemented within a distributed environment having a management server).

11. Thus, given the teaching of Feridun, it would have been obvious to one of the ordinary skill person in the art at the time of the invention to modify the teaching of Bauer to expressly disclose the management system with event correlation services. It would have been advantageously provide more efficient event correlation techniques within a distributed computer environment wherein distributed monitors use events to convey status changes in monitoring objects within the environment (Feridun: col. 1, lines 52-55).

12. Regarding claim 2, Bauer-Feridun discloses the management system according to claim 1, wherein Feridun discloses the correlation services directly communicate with resources (correlation rules adapted to recognize a given pattern of one or more events indicative of given condition) (see Fig. 8).

13. Regarding claim 3, Bauer-Feridun discloses the management system according to claim 1, wherein Feridun further discloses rules for filtering low-level events issued by resources are deployed into an event service application that is used to filter high-level events out of low-level events (see abstract, col. 2, lines 4-9; set of simple or "low-level" correlation rules which may be useful in recognizing a given pattern or one or more events indicative of given condition sought to be control or monitor).

14. Regarding claim 4, Bauer-Feridun discloses the management system according to claim 3, wherein Feridun discloses the controller communicates with the event

Art Unit: 2444

service application (see abstract, col. 2, lines 4-9; set of simple or “low-level” correlation rules which may be useful in recognizing a given pattern or one or more events indicative of given condition sought to be control or monitor).

15. Regarding claim 5, Bauer-Feridun the management system according to claim 1, wherein Feridun discloses the correlation services are modeled as stateful web services (see col. 2, lines 41-58, col. 7, lines 3-13; (JVM) associated with a Web browser).

16. Regarding claim 6, Bauer discloses a method for managing distributed resources (135) (resource manager) (see Fig. 1), comprising the steps of: a) a user defining a correlation model comprising the definitions of several correlation services for different functional parts of the managed system (Work Management engine is responsible for initiation and control of all workflow functions within the system) (see col. 6, lines 8-24); and b) the controller instantiates correlation services as running stateful web services in accordance with the definitions of the correlation model (rules engine and rules data for customer care center in integrated work management system) (see col. 9, lines 9-56).

17. Although Bauer discloses substantial features of applicant’s claimed invention, Bauer fails to disclose: wherein services are autonomic correlation services.

Nevertheless, autonomic correlation services were well known in the art at the time of the present invention.

18. In analogous teaching, Feridun discloses wherein services are correlation services (see abstract, col. 2, lines 21-25; method of event correlation that preferably implemented within a distributed environment having a management server).

Art Unit: 2444

19. Thus, given the teaching of Feridun, it would have been obvious to one of the ordinary skill person in the art at the time of the invention to modify the teaching of Bauer to expressly disclose the management system with event correlation services. It would have been advantageously provide more efficient event correlation techniques within a distributed computer environment wherein distributed monitors use events to convey status changes in monitoring objects within the environment (Feridun: col. 1, lines 52-55).

20. Regarding claim 7, Bauer-Feridun discloses the method according to claim 6, wherein Feridun further comprising the step of: storing handles to all of the resources managed by a correlation service within that correlation service (see abstract, col. 2, lines 4-9; recognizing a given pattern or one or more events indicative of given condition sought to be control or monitor).

21. Regarding claim 8, Bauer-Feridun discloses the method according to claim 6, wherein Feridun further comprising the steps of: defining high-level events to which a specific correlation service shall react; and a respective correlation service creating subscriptions with an event service in order to be notified when said events are detected (see abstract, col. 2, lines 4-9; set of simple or "low-level" correlation rules which may be useful in recognizing a given pattern or one or more events indicative of given condition sought to be control or monitor).

22. Regarding claim 9, Bauer-Feridun discloses the method according to claim 6, wherein Feridun further comprising the step of: the higher-level correlation services using web service introspection for seeing which events are issued by another

Art Unit: 2444

correlation service (see abstract, col. 2, lines 4-9; set of simple or "low-level" correlation rules which may be useful in recognizing a given pattern or one or more events indicative of given condition sought to be control or monitor).

23. Regarding claim 10, Bauer-Feridun discloses the method according to claim 6, wherein Feridun further comprising the step of: the correlation services triggering an execution of workflows in order to actively manage their resources (see abstract, col. 2, lines 4-9; Fig. 6).

24. Regarding claim 11, this claimed limitation has already been addressed previously rejected claim 6, except being a computer program product comprising a computer useable medium embodying program instructions executable by a computer, therefore is rejected for the same rational. Furthermore with regards to claim 11 being computer program product, it would have been obvious for the method claim of 6 to have form through the process of computer program product.

Prior Art of the Record

25. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see the form PTO-892 (Notice of Cited References) for more relevant prior arts.

Conclusion

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to UMAR CHEEMA whose telephone number is (571)270-3037. The examiner can normally be reached on M-F 8:30AM-5:00PM.

Art Unit: 2444

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Jr. Vaughn can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/U. C./

Examiner, Art Unit 2444

/William C. Vaughn, Jr./

Supervisory Patent Examiner, Art Unit 2444